

Title (en)  
Power converter control method

Title (de)  
Stromwandlersteuerungsverfahren

Title (fr)  
Procédé de commande d'un convertisseur de puissance

Publication  
**EP 2453133 A1 20120516 (EN)**

Application  
**EP 10382294 A 20101111**

Priority  
EP 10382294 A 20101111

Abstract (en)  
Optimizes the operation and control of electric generators against events produced in the power grid, such as voltage dips or overvoltages, comprising the following steps: detecting that the DC bus voltage level (V bus ) (301) exceeds the maximum operating limit established in normal conditions; enabling activation permission of the chopper (201); activating the different operating states (304) of the chopper (201) according to the DC bus voltage level (V bus ) (301) and to the current entering the DC bus (I in.bus ) from the generator; detecting that the DC bus voltage level (V bus ) (301) is within the normal operating range; enabling deactivation permission of the chopper (201); deactivating the different operating states (304) of the chopper (201) according to the DC bus voltage level (Vbus) (301) and to the current entering the DC bus (I in.bus ) from the generator.

IPC 8 full level  
**F03D 9/00** (2006.01); **H02P 9/00** (2006.01)

CPC (source: EP KR US)  
**F03D 9/00** (2013.01 - EP US); **F03D 80/82** (2016.05 - EP US); **H02J 3/24** (2013.01 - EP US); **H02M 1/32** (2013.01 - KR); **H02M 3/155** (2013.01 - KR); **H02P 3/22** (2013.01 - EP US); **H02P 9/00** (2013.01 - EP US); **H02P 9/006** (2013.01 - EP US); **Y02E 10/72** (2013.01 - EP US); **Y02E 10/76** (2013.01 - EP)

Citation (applicant)  
• JP H07194196 A 19950728 - TOSHIBA CORP, et al  
• US 7015595 B2 20060321 - FEDDERSEN LORENZ [DE], et al  
• US 2009079193 A1 20090326 - NIELSEN JOHN GODSK [DK], et al

Citation (search report)  
• [YD] WO 2006069569 A1 20060706 - VESTAS WIND SYS AS [DK], et al  
• [Y] JP 2005269843 A 20050929 - MITSUBISHI ELECTRIC ENG, et al  
• [A] US 2009206606 A1 20090820 - JORGENSEN ALLAN HOLM [DK], et al  
• [A] WO 2010045964 A1 20100429 - WOODWARD SEG GMBH & CO KG [DE], et al  
• [A] EP 1863162 A2 20071205 - GEN ELECTRIC [US]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2453133 A1 20120516**; **EP 2453133 B1 20171011**; BR PI1105476 A2 20150707; BR PI1105476 A8 20190910; BR PI1105476 B1 20230926; BR PI1105477 A2 20150707; BR PI1105477 B1 20200602; CN 102545202 A 20120704; CN 102545202 B 20160203; DK 2453133 T3 20171120; ES 2654595 T3 20180214; KR 101803578 B1 20171130; KR 20120050917 A 20120521; US 2012119722 A1 20120517; US 8953344 B2 20150210

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**EP 10382294 A 20101111**; BR PI1105476 A 20111111; BR PI1105477 A 20111111; CN 201110369114 A 20111111; DK 10382294 T 20101111; ES 10382294 T 20101111; KR 20110117616 A 20111111; US 95756710 A 20101201